

DIVIDE-BY-TWELVE COUNTER

MC5400/7400 series

MC5492F,L*
MC7492F,L,P*

COUNT SEQUENCE TRUTH TABLE

COUNT	OUTPUT			
	Q3	Q2	Q1	Q0
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	1	0	0	0
7	1	0	0	1
8	1	0	1	0
9	1	0	1	1
10	1	1	0	0
11	1	1	0	1

A connected to $\bar{C}1$

This 4-bit counter is comprised of a divide-by-two section and a divide-by-six section. These sections can be used independently, or can be connected to perform the divide-by-twelve function. When used independently, the divide-by-six section provides the divide-by-three function at the C output and the divide-by-six function at the D output. The outputs may be set to the logic "0" state any time during the counting sequence by setting both R0 inputs to the logic "1" state.

V_{CC} = PIN 5
Gnd = PIN 10

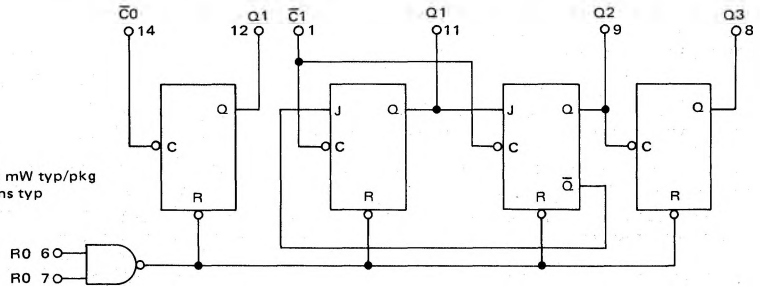
Input Loading Factor:

R0 = 1
C1 = 2
C2 = 4

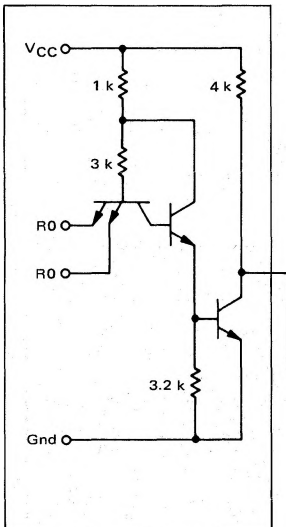
Output Loading Factor = 10

Total Power Dissipation = 160 mW typ/pkg

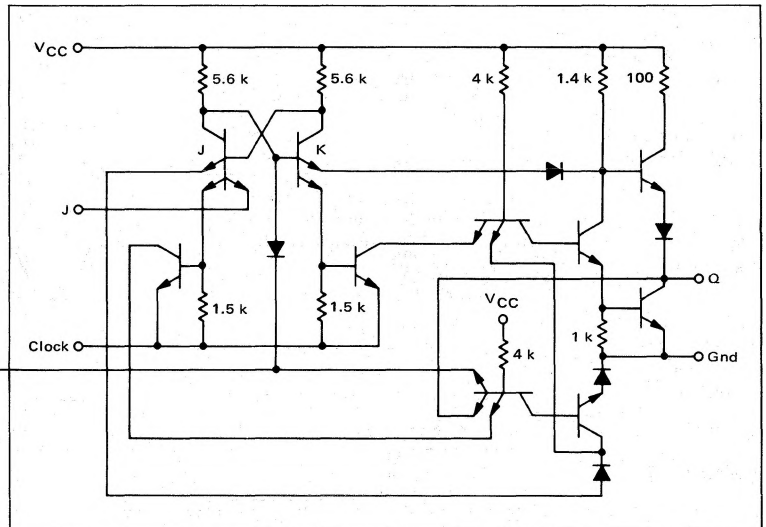
Propagation Delay Time = 60 ns typ



RESET GATE



TYPICAL FLIP-FLOP



*F suffix = TO-86 ceramic flat package (Case 607).

L suffix = TO-116 ceramic dual in-line package (Case 632).

P suffix = TO-116 plastic dual in-line package (Case 605).

MC5492F,L, MC7492F,L,P (continued)



Pulse 1: Momentarily apply V_{th1} then ground prior to taking measurement to set the device in the desired state. — V_{th1} — $\overline{V_{th1}}$ — GND
Maintain ground for measurement.

Pulse 2: Apply positive pulse prior to taking measurement to set the device in the desired state. Maintain ground for measurement.

① All input, power supply and ground voltages must be maintained between each test unless otherwise noted.

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